



Automate everything with Red Hat Ansible Automation Platform

Automation is critical to digital transformation as businesses move applications and infrastructure into cloud environments, deploy mobile apps and scale to meet demand in real time. The complexity of managing IT across multiple environments, technologies and geographies introduces delays, security issues and inefficiencies into the IT process that automation can solve.

Yet, even with automation, there can be complexity if businesses use multiple automation and orchestration tools to manage various parts of their infrastructure. A single, flexible automation tool that can work across an entire multidomain process is important. Many businesses have chosen to automate their infrastructure and applications with [Red Hat Ansible Automation Platform](#), recognized by Forrester Wave as a “leader” in infrastructure automation.¹

Ansible provides a simple, flexible and scalable solution for IT operations, developers and entire teams. With Ansible Automation Platform, organizations can eliminate the complex scripts and manual processes that frequently introduce errors during configuration and provisioning while accelerating application and resource deployment with repeatable automation playbooks that accomplish specific tasks. It includes certified automation content from 90+ ecosystem partners (and growing) that can help IT teams get new automation projects up and running quickly.

Ansible’s easy-to-use YAML coding language simplifies the process so that nearly anyone can begin writing playbooks. The declarative nature of Ansible’s programming language means that automation content creators don’t even need to know what state the configured system is in; they simply identify the desired end state and Ansible does the rest. Ansible also delivers a more secure remote configuration experience through OpenSSH technology and a minimized attack surface.

Scale up digital transformation with “infrastructure as a code” automation

The digital transformation movement, in concert with the growth of cloud technology, has created a unique opportunity to extend the concept of infrastructure beyond the traditional data center. With this opportunity, however, comes new challenges as IT operations teams must enforce consistent policies, maintain updates and patches, and spin up/tear down resources in a variety of different environments. Ansible Automation Platform has the power to harness this new virtualized data center by treating infrastructure as a code that can be easily stated, validated and replicated in any environment.

There are five key use cases for Ansible today:

- Provisioning
- Application deployment and orchestration
- Continuous Integration/Continuous Delivery (CI/CD)
- Network automation
- Security automation



Provisioning

IT operations teams spend a lot of their time provisioning resources for developers and applications. There are cloud resources that need to be provisioned (both public and private), virtualized hosts, bare-metal servers, network devices, etc. With Ansible, you can create a single provisioning playbook and seamlessly execute it across multiple network environments. Ansible’s automation capability doesn’t stop with servers. You can automatically provision networks, load balancers, storage resources or other devices that require provisioning to support IT operations. In a similar way, automation can be used as a single technology to consistently complete actions on a multivendor network process or across an IT process such as application deployment.



Application deployment and orchestration

Automating application deployment allows businesses to rapidly deploy and scale applications dramatically faster, whether the application is hosted on a virtual machine, a cloud instance, or both. With Ansible, apps can be deployed simply and executed consistently across multiple environments and IT domains. For example, a process may require provisioning a cloud instance and networking, running security checks, provisioning storage resources, and more. Ansible is a single, flexible automation tool that lets IT teams orchestrate full processes. And when it’s time to update an application, Ansible can orchestrate the updates so that low or zero-downtime is achieved and users don’t experience disruptions.



Continuous integration and delivery

Application developers thrive in an agile environment where integration, testing and deployment are continually in motion. Yet provisioning and integration of developer resources can quickly create a bottleneck that blocks agility. [Ansible opens the door to CI/CD](#) by spinning up hundreds of servers in seconds if needed.



Network automation

Networks are increasing in complexity due to a growing number of edge and IoT devices as well as multiclouds. They are more important than ever in a digital world that includes proliferating hybrid cloud architectures and more processing outside of the data center. Because of this, manual network management is giving way to network automation. Many networking vendors offer tools that automate specific tasks on their solutions. Ideally, IT teams need an automation platform that is agile enough to automate across networking solutions and across full IT processes. This helps expand the value delivered from automation.



Security automation

Manual response to security risks is daunting. Threats must be addressed quickly, and this can mean applying the same patch or solution to hundreds or thousands of systems. Done manually, this can be a slow and error-prone process. What happens, for example, when a threat must be addressed on multiple solutions, such as a firewall and an operating system? Automation that is flexible enough to work across these solutions is critical to quickly resolve these risks with fewer errors.

Automate with confidence

As with all Red Hat products, Ansible is developed in the open-source model and enjoys a strong and enthusiastic community that contributes in many ways to the platform. One benefit of this is a strong ecosystem of products that work with Ansible. For enterprise automation, organizations need support, curated and certified content collections, scalability, a security-hardened code foundation, and the ability to manage it all. Ansible Automation Platform is a subscription-based solution that integrates multiple open-source projects so that it is ready to use. Instead of integrating, upgrading and maintaining various vendor-specific automation tools, IT teams can focus on delivering on automation’s value. Ansible Automation Platform makes it simple: one subscription, one platform for automation across the enterprise, one human-readable language.



Ansible Automation Platform enables organizations to automate with confidence. Subscribers get access to more than 90 unique, certified content collections featuring curated playbooks from Red Hat and its partners. Subject matter experts from Red Hat are also available for consultation and training to help IT teams advance on their journey to end-to-end automation.

Automation is more than an efficiency play. It can have a dramatic impact on your organization’s bottom line. Studies have shown that using an automation platform such as Ansible can multiply business ROI by nearly 500 percent over five years. For application developers, automation can increase the number of applications developed by 135 percent. And, in a world where customer experience is king, automation can cut unplanned downtime in half.²

Aligning automation with productivity and revenue is possible with an Ansible subscription through built-in analytics and monitoring tools that reveal how automation improves costs and drives revenue. Ultimately, automation enables business agility, fosters innovation and consistently drives great user experiences. It has the power to transform the way you do business, so get started on your journey to full automation today with our free trial.

Begin free trial

→

Source

1. “Red Hat Named a Leader by Independent Research Firm in Infrastructure Automation Platforms Evaluation,” redhat.com, August 13, 2020, <https://www.redhat.com/en/about/press-releases/red-hat-named-leader-independent-research-firm-infrastructure-automation-platforms-evaluation> (last accessed on June 21, 2021)

2. IDC White Paper, sponsored by Red Hat, Red Hat Ansible Automation Improves IT Agility and Time to Market, IDC, June 2019.